

IN THE CLAIMS

Amend the claims as indicated below.

Claims 1-19 (canceled).

1 20. (currently amended) A GPS receiver, comprising:
2 a first GPS antenna coupled to a digital memory, the digital memory storing first
3 digitized signals obtained through the first GPS antenna;
4 a second GPS antenna coupled to the digital memory, the digital memory storing second
5 digitized signals obtained through the second GPS antenna;
6 a digital processor coupled to the digital memory, the digital processor processing the
7 first digitized signals after being stored in the digital memory to provide first position
8 information and processing the second digitized signals after being stored in the digital memory
9 to provide second position information;
10 a receiver, including data detection circuitry configured to decode data encoded upon a
11 spread spectrum modulated signal ~~received from the GPS~~ using a matched filter residing within
12 the receiver, the data being demarcated into successive data epochs; and
13 wherein the matched filter decodes periodic phase shift data encoded upon the signal by
14 phase shifts of the data epochs.

Claims 21-27 (canceled).

1 28. (original) A method of tracking a remote object comprising the steps of:
2 fitting a remote object with a positioning sensor configured to receive and store
3 positioning information when the remote object is in a fix position;
4 positioning the remote object in a fix position such that the positioning sensor is capable
5 of detecting an activation signal;
6 receiving and storing a predetermined amount of data in the positioning sensor, the data
7 comprising position information;
8 processing the data to determine the location of the fix position;

9 decoding data encoded upon a signal using a matched filter, the data being demarcated
10 into successive data epochs; and
11 decoding periodic phase shift data encoded upon the signal by phase shifts of the data
12 epochs using the matched filter.

Claim 29 (canceled).

1 30. (original) A computer readable medium containing an executable computer
2 program for use in a digital processing system, the executable computer program when
3 executed in the digital processing system causing the digital processing system to perform the
4 steps of:
5 performing a plurality of convolutions on a corresponding plurality of blocks of sampled
6 GPS signals to provide a plurality of corresponding results of each convolution;
7 summing a plurality of mathematical representations of the plurality of corresponding
8 results to obtain a first position information;
9 decoding data encoded upon a signal using a matched filter, the data being demarcated
10 into successive data epochs; and
11 decoding periodic phase shift data encoded upon the signal by phase shifts of the data
12 epochs using the matched filter.

Claims 31-36 (canceled).